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(54) Title: FUEL CELL STACK DEFROSTING

(57) Abstract: A fuel cell power plant comprises a fuel cell stack (1) constituted by a plurality of fuel cells which perform electric power generation by means of a reaction of hydrogen and oxygen. A controller (16) determines whether or not moisture inside the fuel cell stack (1) is frozen, and if the moisture is frozen, the controller (16) causes the fuel cell stack (1) to perform intermittent electric power generation via an inverter (27) while continuing to supply oxygen to the fuel cell stack (1). The fuel cell stack (1) generates heat as a result of the electric power generation, whereby moisture is generated in a cathode (9). During the periods in which electric power generation is not performed, the oxygen which is supplied to the cathode (9) of the fuel cells scavenges the generated moisture, thereby ensuring the supply of oxygen to the cathode (9) during electric power generation.

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/JP 03/07256

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 H01M8/04

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC, COMPENDEX

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 798 186 A (FLETCHER NICHOLAS J ET AL) 25 August 1998 (1998-08-25) abstract column 2, line 51 - line 61 column 3, line 4 - line 54 column 5, line 55 -column 6, line 3 column 7, line 35 - line 36 column 7, line 53 -column 8, line 67 --	1-20
A	US 2002/009623 A1 (JIA NENG YOU ET AL) 24 January 2002 (2002-01-24) paragraphs '0001!, '0012!, '0016! --	1-20 --

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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A	US 2002/051898 A1 (LILLIS MARK A ET AL) 2 May 2002 (2002-05-02) paragraphs '0025!, '0026! ----	8
E	US 2003/162066 A1 (ANDO MASA0 ET AL) 28 August 2003 (2003-08-28) paragraphs '0056!-'0070!, '0084! figures 9,10 -----	1-5,7,9, 19,20

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